

Amendment to the Claims:

Please delete all of the claims of the parent application having the Application No. 09/910,066 and filed on July 20, 2001.

In this continuation application, the following claims are to be prosecuted:

1. A light-emitting device comprising:
a plurality of electrode layers, including an anode layer and a cathode layer;
an electro-luminescent organic layer disposed between the anode and cathode layers;
and
a poly-siloxane insulating structure separating the electro-luminescent organic layer into a plurality of light-emitting elements,
wherein the electro-luminescent organic layer is deposited from solution using wet-chemical techniques.
2. The device of claim 1 wherein the wet-chemical techniques comprise spin-casting, dip-coating, screen printing, flexo printing, or ink-jet printing.
3. The device of claim 1 wherein the electro-luminescent organic layer is substantially flat.
4. The device of claim 1 wherein at least one electrode layer is configured to independently address at least one aperture of the poly-siloxane insulating structure as a display pixel, and wherein each of the at least one electrode layer is coupled to a corresponding transistor.
5. The device of claim 1 wherein the poly-siloxane insulating structure forms a bank structure that insulates the plurality of light-emitting elements from each other.

6. The device of claim 1 further comprising one or more insulating strips on the poly-siloxane insulating structure, and wherein at least one insulating strip comprises an overhanging portion or a base portion or both.
7. The device of claim 6 wherein the at least one insulating strip comprises poly-siloxane material in one or both of the overhanging portion and the base portion.
8. A method of fabricating a light-emitting device, the method comprising:
 - forming a first electrode layer on a substrate;
 - forming on the first electrode layer a poly-siloxane bank structure having apertures;
 - depositing from solution using wet-chemical techniques one or more organic layers into the apertures of the poly-siloxane bank structure; and
 - forming a second electrode layer such that the one or more organic layers deposited into the apertures are disposed between the first and second electrode layers.
9. The method of claim 8 wherein the wet-chemical techniques comprise spin-casting, dip-coating, screen printing, flexo printing, or ink-jet printing.
10. The method of claim 8 wherein each of the one or more organic layer is substantially flat.
11. The method of claim 8 wherein depositing one or more organic layers comprises depositing an electro-luminescent organic layer.
12. The method of claim 8 further comprising patterning the poly-siloxane bank structure to separate the light-emitting device into a plurality of pixels.
13. The method of claim 8 wherein the poly-siloxane bank structure is formed before the one or more organic layers are deposited.
14. The method of claim 8 further comprising forming one or more insulating strips on the poly-siloxane bank structure.

15. The method of claim 14 wherein the one or more insulating strips are formed on the poly-siloxane bank structure between apertures.
16. The method of claim 15 wherein the at least one insulating strip comprises an overhanging portion or a base portion or both.
17. The method of claim 16 wherein the at least one insulating strip comprises poly-siloxane in one or both of the overhanging portion and the base portion.
18. An organic light-emitting device (OLED) comprising:
 - a plurality of light-emitting elements, each light-emitting element comprising an electro-luminescent layer disposed between electrodes; and
 - at least one structure comprising poly-siloxane material, wherein the structure is configured to separate elements of the OLED,
 - wherein the electro-luminescent layer is formed by depositing solution using wet-chemical techniques.
19. The OLED of claim 18 wherein the wet-chemical techniques comprise spin-casting, dip-coating, screen printing, flexo printing, or ink-jet printing.
20. The OLED of claim 18 wherein the electro-luminescent layer is substantially flat.
21. The OLED of claim 18 wherein the at least one structure comprises a poly-siloxane bank structure configured to separate light-emitting elements from each other.
22. The OLED of claim 21 wherein the poly-siloxane bank structure includes apertures into which light-emitting elements are arranged.
23. The OLED of claim 21 wherein the poly-siloxane bank structure physically and electrically insulates the light-emitting elements from each other.
24. The OLED of claim 18 further comprising one or more insulating strips on the at least one structure.

25. The OLED of claim 24 wherein the at least one insulating strip comprises an overhanging portion or a base portion or both.

26. The OLED of claim 25 wherein the at least one insulating strip comprises polysiloxane material in one or both of the overhanging portion and the base portion.